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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/623,626 | 07/21/2003 | Shuji Yamakawa | 5258-000017 | 5176 |
| 25944 | 7590 | 07/21/2005 | | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | EXAMINER FIGUEROA, FELIX O | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2833 | |
| DATE MAILED: 07/21/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/623,626

Applicant(s)

YAMAKAWA ET AL.

Examiner

Felix O. Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 6,402,530) in view of Galletly (US 4,739,441) and Hatagishi et al. (US 5,954,533).

Saito discloses a connection structure between bus bars (16) and relay terminals (30a) in an electrical connection box (10) to be mounted on an automobile, the connection structure comprising: each bus bar formed into a desired circuit configuration; an end (16d) of each of the bus bar being bent so that each end is connected to a respective one of the relay terminals; each bus bar being welded to each respective relay terminal (col. 5 lines 52-60). Regarding the recitation "produced by punching", the method of forming a device is not germane to the issue of patentability of the device itself. Since this recitation does not provide any structural difference or advantage over the prior art structure, it has been given patentable little weight.

Saito discloses substantially the claimed invention except for the specific material for the bus bars. Galletly teaches that the use of aluminum-based bus bars (col.5 lines 1-5) is known. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an aluminum-based metal as the preferred material

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for the bus bars, in order to provide a lighter-weight bus bar, and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design preference. *In re Leshin*, 125 USPQ 416.

Saito, as modified, discloses substantially the claimed invention except for the insulation resin around the connection parts. Hatagishi teaches the use of an insulating resin (30) surrounding joint connection parts (at 22) to strengthen and protect the connection (col.6 lines 27-29). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the welded connection parts of Saito embedded in a molded resin insulation, as taught by Hatagishi, to strengthen and protect the connection.

Saito, as modified, discloses substantially the claimed invention except for material of the relay terminal being different from the material of the bus bar. However, it would have been an obvious matter of design preference to make the bus bar and the terminals from different materials, since applicant has not disclosed that such arrangement solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the bus bar and terminal of Saito, as modified. Absent any convincing showing of the criticality of the design, this particular design is nothing more than the inventor's choice without thereby departing from the scope of the invention. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

Regarding claim 3, Saito, as modified, discloses substantially the claimed invention except for specific material of the terminal. It would have been obvious to one

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having ordinary skill in the art at the time the invention was made to form the terminals from a copper based material in order to provide superior conductivity, and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design preference. *In re Leshin*, 125 USPQ 416.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 6,402,530) in view of Galletly and Hertelendy (US 5,205,757).

Saito discloses a connection structure between bus bars (16) and relay terminals (30a) in an electrical connection box (10) to be mounted on an automobile, the connection structure comprising: each bus bars formed into a desired circuit configuration; an end (16d) of each of the bus bar being bent so that each end is connected to a respective one of the relay terminals; each bus bar being welded to each respective relay terminal. Regarding the recitation "produced by punching", the method of forming a device is not germane to the issue of patentability of the device itself. Since this recitation does not provide any structural difference or advantage over the prior art structure, it has been given patentable little weight.

Saito discloses substantially the claimed invention except for the specific material for the bus bars. Galletly teaches that the use of aluminum-based bus bars (col.5 lines 1-5) is known. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an aluminum-based metal as the preferred material for the bus bars, in order to provide a lighter-weight bus bar, and since it has been held to be within the general skill of a worker in the art to select a known material on the

basis of its suitability for the intended use as a matter of obvious design preference. *In re Leshin*, 125 USPQ 416.

Saito, as modified, discloses substantially the claimed invention except for the grease surrounding the connection parts. Hertelendy teaches the use of grease surrounding joint connection parts (A and 20A) to protect the connection against dust and moisture (col.1 lines 57-61, col.3 lines 33-38). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the welded connection parts of Saito surrounded by grease, as taught by Hertelendy, to protect the connection against dust and moisture.

Saito, as modified, discloses substantially the claimed invention except for material of the relay terminal being different from the material of the bus bar. However, it would have been an obvious matter of design preference to make the bus bar and the terminals from different materials, since applicant has not disclosed that such arrangement solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the bus bar and terminal of Saito, as modified. Absent any convincing showing of the criticality of the design, this particular design is nothing more than the inventor's choice without thereby departing from the scope of the invention. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

Regarding claim 4, Saito, as modified, discloses substantially the claimed invention except for specific material of the terminal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the terminals from a copper based material in order to provide superior conductivity, and since it has

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been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design preference. *In re Leshin*, 125 USPQ 416.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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THO D. TA
PRIMARY EXAMINER